

NOVEMBER/DECEMBER 2025

**23PCS22 — ADVANCED OPERATING  
SYSTEMS**

Time : Three hours

Maximum : 75 marks

**SECTION A — (10 × 2 = 20 marks)**

Answer ALL questions.

1. List down the advantages of Distributed Systems.
2. Differentiate between Multiprogramming and Non-Multiprogramming.
3. What are the benefits of a Distributed File System?
4. Compare Stateless versus Stateful Server.
5. Write any four Characteristics of Real Time System.
6. Define the term Reliability.
7. List down the features of Palm OS.
8. What are the disadvantages of Handheld System?



9. Write the goals of Linux Operating System.
10. Specify the functions of Core OS Layer of IOS.

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Briefly describe the significance of Multiprocessor Operating System.

Or

- (b) Narrate the method to handle deadlocks.

12. (a) Describe the general structure of Distributed Operating Systems.

Or

- (b) Write an Overview of the Coda File System.

13. (a) Illustrate the basic Model of Real Time System.

Or

- (b) Explain the Safety and Reliability of a Real Time Operating System.

14. (a) Elucidate the architecture of Android.

Or

- (b) How to secure Handheld Systems? Explain.

15. (a) Illustrate the SDK Framework.

Or

- (b) Compare and contrast Android OS and IOS.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Narrate three types of Scheduling Queues and also describe the differences among Short-term, Medium-term and Long-term Scheduling.
17. Explicate the Deadlock handling strategies in Distributed Operating Systems.
18. Analyze about the Applications of Real Time Systems.
19. Examine the significance of Symbian Operating System.
20. Generalize the importance of Memory Management in Linux.

